The Afghanistan Agrometeorological Monthly Bulletin

Issue No:48

February 2009

Loger province with -18.2 C° experienced extreme cold in the month of February 2009 while Kandahar with 25 C° was the warmest spot.

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USGS

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CONTENTS

CONTENTS

Summary

Afghanistan experienced an increase of rainfall all over the country compared to the same month of last year except in parts of Farah, Lashkarkag and Jalalabad, where majority of irrigated and rain fed land are located.

The central high land and Hindokush chain experienced early snow melting. Due to lack of infrastructure, most of the snowmelt was lost to runoff before its captured for irrigation uses. Potential flash flood may result from runoff.

Reports from meteorological stations show that various parts of the country that are explained in page 4 experienced above normal temperature which contributed to early snow melt. NDVI (Normalized Difference Vegetation Index) value had a small increase in Eastern, Southeast and Western region compared to the same month of last year while the country experience a large decrease of NDVI value compared to the same month of long term average.

Wheat is in dormancy and in emerging stage in some parts of the country (that are specified inside the bulletin) except the Eastern region where wheat is in vegetative stage.

Reports from Hirat province show an increase of rainfall and rain fed cultivation.

Zone	Province	District	Station	Wheat Crop Stage	Crop Condition	Adverse Factor
Central	Kabul	Shakardara	Karizmir	Dormancy	Not visible	Not seen
		Paghman	Paghman	Dormancy	Not visible	Not seen
		Sarubi	Sarubi	Vegetative	Normal	Not existed
	Panjsher	Dara	Dara	Dormancy	Not visible	Not seen
		Dashtak	Dashtak	Dormancy	Not visible	Not seen
	Parwan	Ghorband	Syagerd	Emergence	Not visible	Not seen
		Charikar	Charikar	Emergence	Not visible	Not seen
	Kapisa	Mahmoodraqi	Mahmoodraqi	Emergence	Not visible	Not seen
		Kohistan	Kohistan	Emergence	Not visible	Not seen
	Wardak	Chak	Chak	Dormancy	Not visible	Not seen
		Jaghatoo	Jaghatoo	Dormancy	Not visible	Not seen
East Central	Bamyan	Bamyan	Bamyan	Dormancy	Not visible	Not seen
		Yakawlang	Yakawlang	Dormancy	Not visible	Not seen
		Panjab	Panjab	Dormancy	Not visible	Not seen
Eastern	Nangarhar	Agam	Agam	Vegetative	Normal	Not existed
		Batikot	Ghaziabad	Vegetative	Normal	Not existed
		Jalalabad	Sheshembagh	Vegetative	Normal	Not existed
		Jalalabad	Farm Jadeed	Vegetative	Normal	Not existed
	Konar	Asmar	Asmar	Vegetative	Good (better than normal)	Not existed
		Asadabad	Asadabad	Vegetative	Good (better than normal)	Not existed
	Laghman	Mihtarlam	Mihtarlam	Vegetative	Normal	Not existed

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

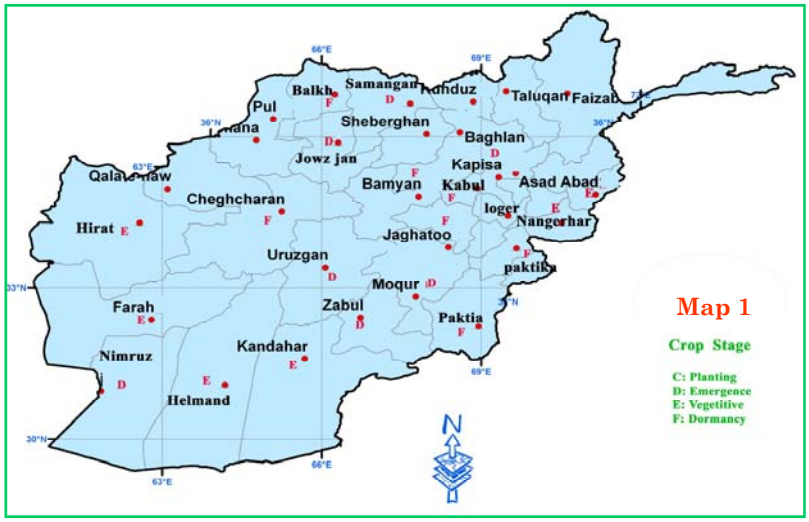
Crop Stage, Crop Condition and Adverse Factor

Zone	Province	District	Station	Wheat Crop Stage	Crop Condition	Adverse Factor
Northeast	Takhar	Bangi	Bangi	Emergence	Not visible	Not seen
		Taluqan	Taluqan	Emergence	Not visible	Not seen
	Kunduz	Imam Sahib	Imam Sahib	Emergence	Not visible	Not seen
		Aqtipa	Aqtipa	Emergence	Not visible	Not seen
		Chardara	Chardara	Emergence	Not visible	Not seen
		Kunduz	Kunduz	Emergence	Not visible	Not seen
	Baghlan	Baghlan Jadid	Pozaishan	Emergence	Not visible	Not seen
	Badakhshan	Faizabad	Faizabad	Dormancy	Not visible	Not seen
South Eastern	Khost	Khost	Khost	Vegetative	Normal	Not existed
		Shimal	Shimal	Vegetative	Normal	Not existed
		Ali Sher	Ali Sher	Vegetative	Normal	Not existed
	Paktia	Gardiz	Rohani Baba	Emergence	Not visible	Not seen
		Zarmat	Tera	Emergence	Not visible	Not seen
	Paktika	Urgon	Urgon	Emergence	Not visible	Not seen
		Sharana	Sharana	Dormancy	Not visible	Not seen
		Khairkot	Khairkot	Dormancy	Not visible	Not seen
	Ghazni	Muqur	Muqur	Dormancy	Not visible	Not seen
		Bande Sardi	Bande Sardi	Dormancy	Not visible	Not seen
Southern	Nimroz	Zaranj	Zaranj	Emergence	Not visible	Not seen
	Kandahar	Kandahar	Kandahar	Vegetative	Normal	Not existed
	Zabul	Qalat	Qalat	Emergence	Not visible	Not seen
	Urozgan	Tarinkot	Tarinkot	Emergence	Not visible	Not seen
	Hilmand	Nad Ali	Nad Ali	Vegetative	Normal	Not existed
		Greshk	Greshk	Vegetative	Normal	Not existed
		Nawa	Nawa	Vegetative	Normal	Not existed
		Lashkargah	Bolan	Vegetative	Normal	Not existed
North	Balkh	Dihdadi	Dihdadi	Vegetative	Normal	Not existed
		Nahrishahi	Nahrishahi	Vegetative	Normal	Not existed
	Jawzjan	Sheberghan	Sheberghan	Emergence	Not visible	Not seen
		Darzab	Darzab	Emergence	Not visible	Not seen
	Saripul	Saripul	Saripul	Emergence	Not visible	Not seen
		Sozmaqala	Sozmaqala	Emergence	Not visible	Not seen
	Faryab	Maimana	Maimana	Emergence	Not visible	Not seen
	Samangan	Aibak	Aibak	Emergence	Not visible	Not seen
		Dara Yosuf	Dara Yosuf	Emergence	Not visible	Not seen
Western	Badghis	Qalainow	Qalainow	Emergence	Not visible	Not seen
		Muqur	Muqur	Emergence	Not visible	Not seen
	Ghor	Chaghcharan	Chaghcharan	Dormancy	Not visible	Not seen
	Hirat	Shindand	Shindand	Vegetative	Normal	Not existed
		Hirat	Farm Urdokhan	Vegetative	Normal	Not existed
	Farah	Farah	Farah	Vegetative	Normal	Not existed

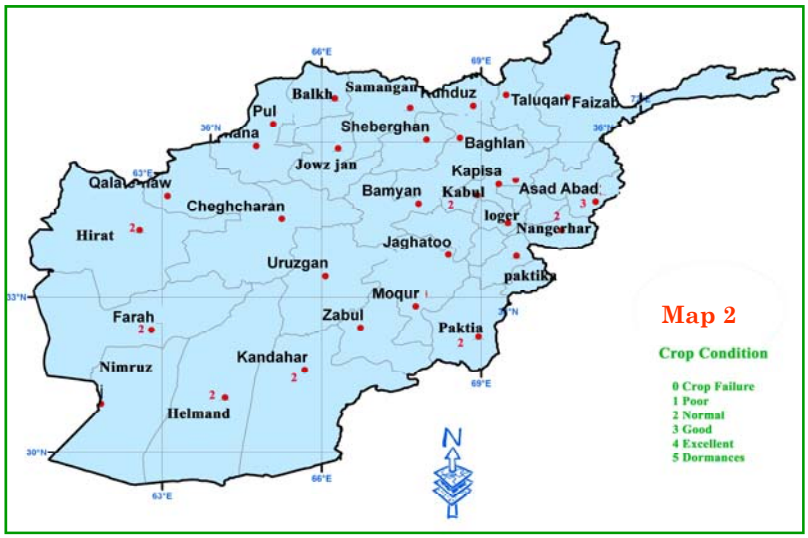
Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Crop Stage, Crop Condition and Adverse Factor, Maps

Wheat Crop Stage - February 2009



Wheat Crop Condition - February 2009



Wheat - Adverse Factor February 2009

Not visible

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

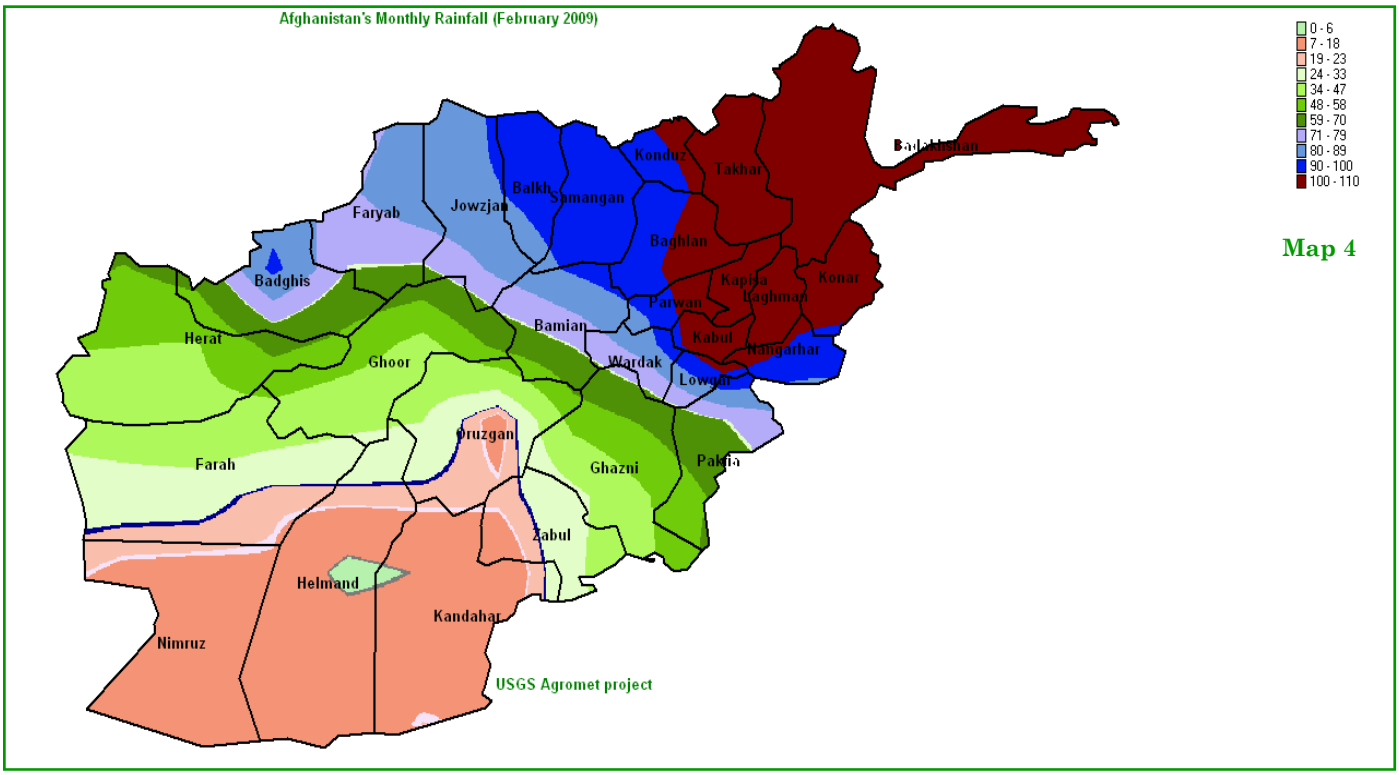
Precipitation

Precipitation for the month of February 2009 recorded significant increase compared to that of the same month in 2008 in most parts of the country, except Farah, Imamsahib, Jalalabad and Lashkargha where rainfall had small decrease for the month of February 2009 compared to that of the same month in 2008, Chart 1.

Table 1 shows percent of +/- in rainfall in various parts of the country.

Comparison of rainfall data for the month of February 2009 with the same month of Long term average (chart 2) shows an increase of rainfall during the month of February 2009 compared to the same month of long term Average in most parts of the country.

Table 2 shows percent +/- comparison with long term average.



Map 4

Map 4 shows rainfall distribution over the various parts of the country. The Northern, Northeastern, Northwestern, some parts of the Eastern and the Capital regions recorded good rainfall during the month of February 2009. The Central Highlands, Western and Southeastern regions did not experience much rainfall during the month of February and the Southern and Southwestern regions received lease amount of rainfall during this month.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Rainfall Graphs for the Month of February 2009

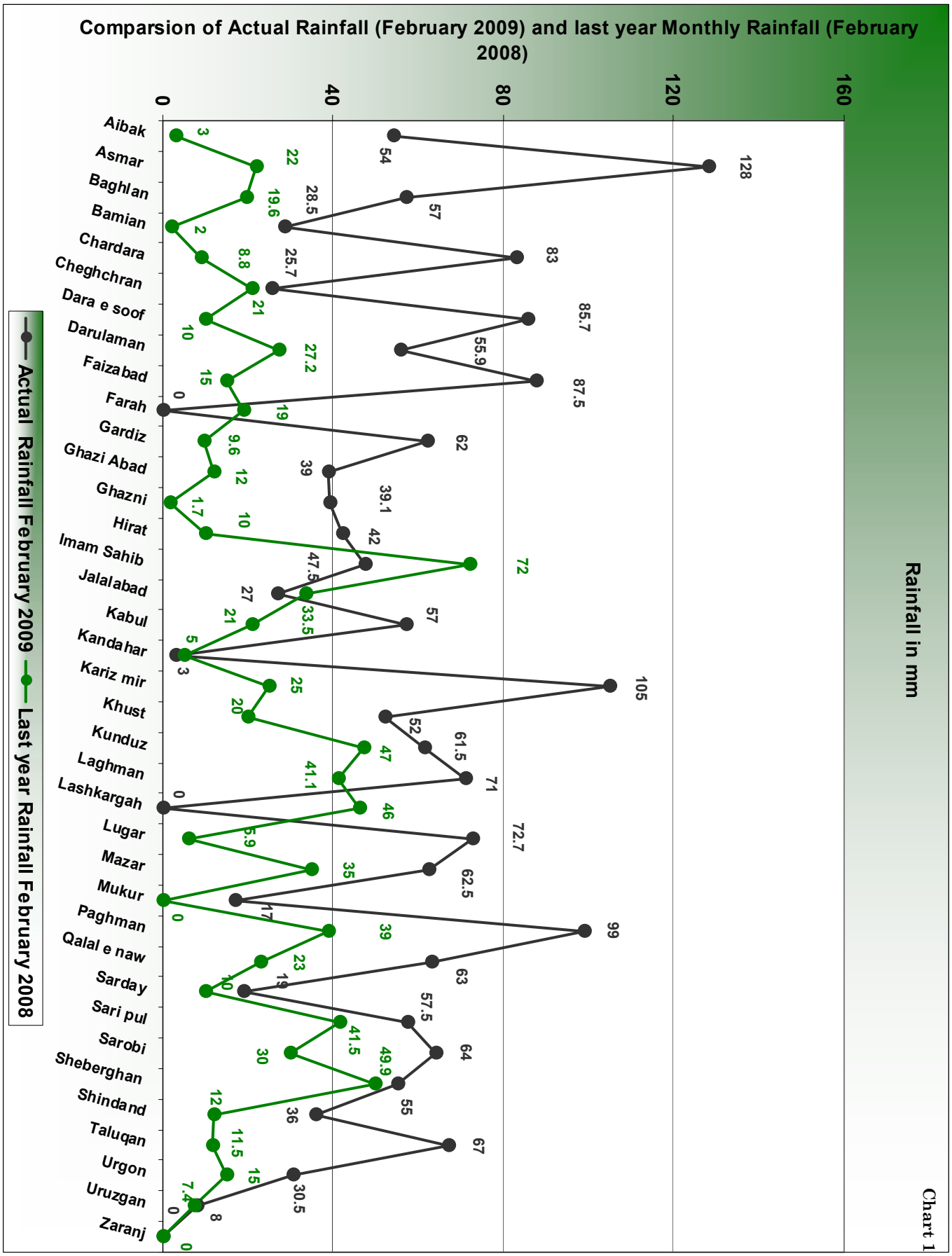


Chart 1

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Rainfall Graphs for the Month of February 2009

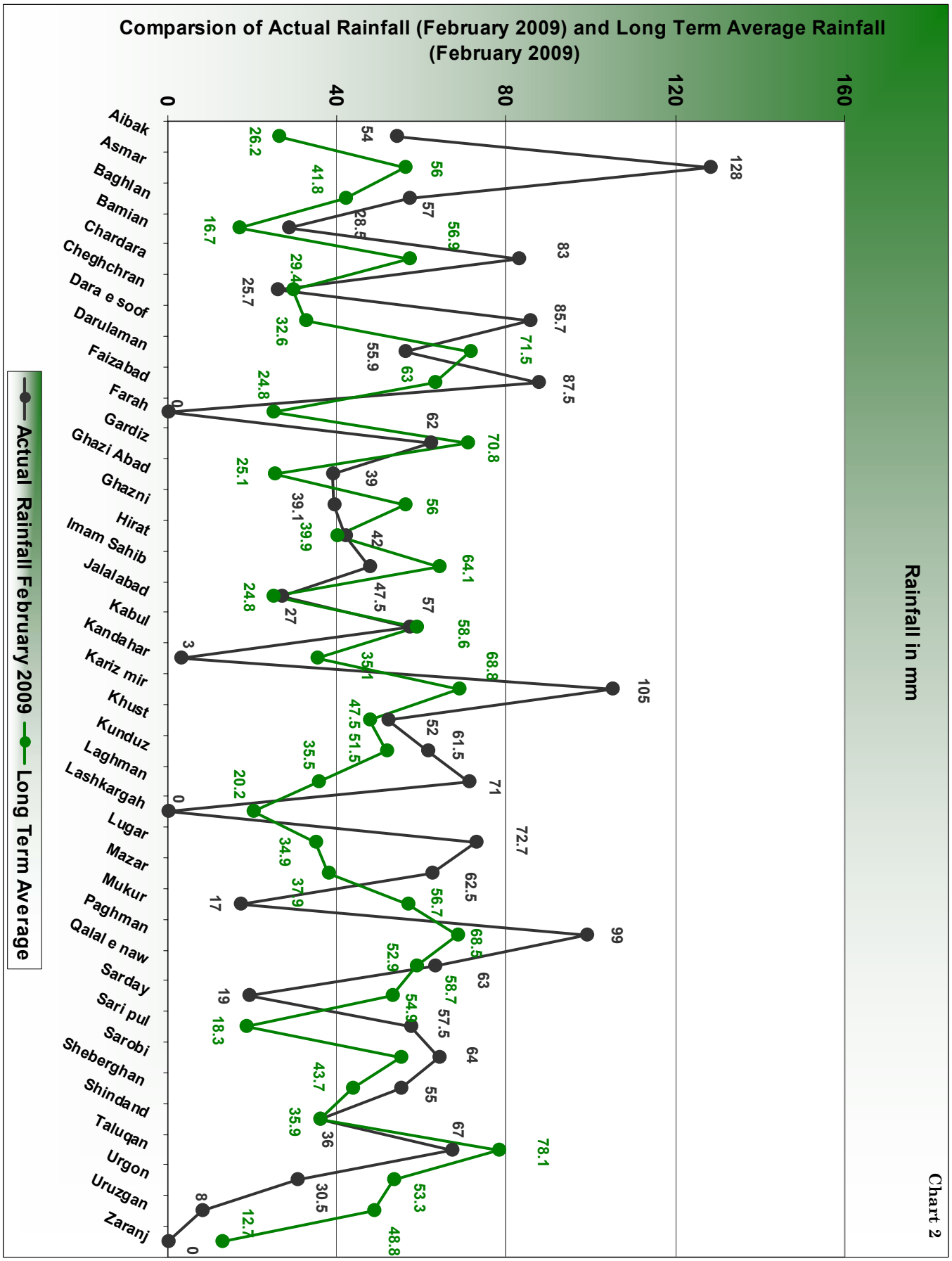


Chart 2

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Rainfall for the Month of February 2009

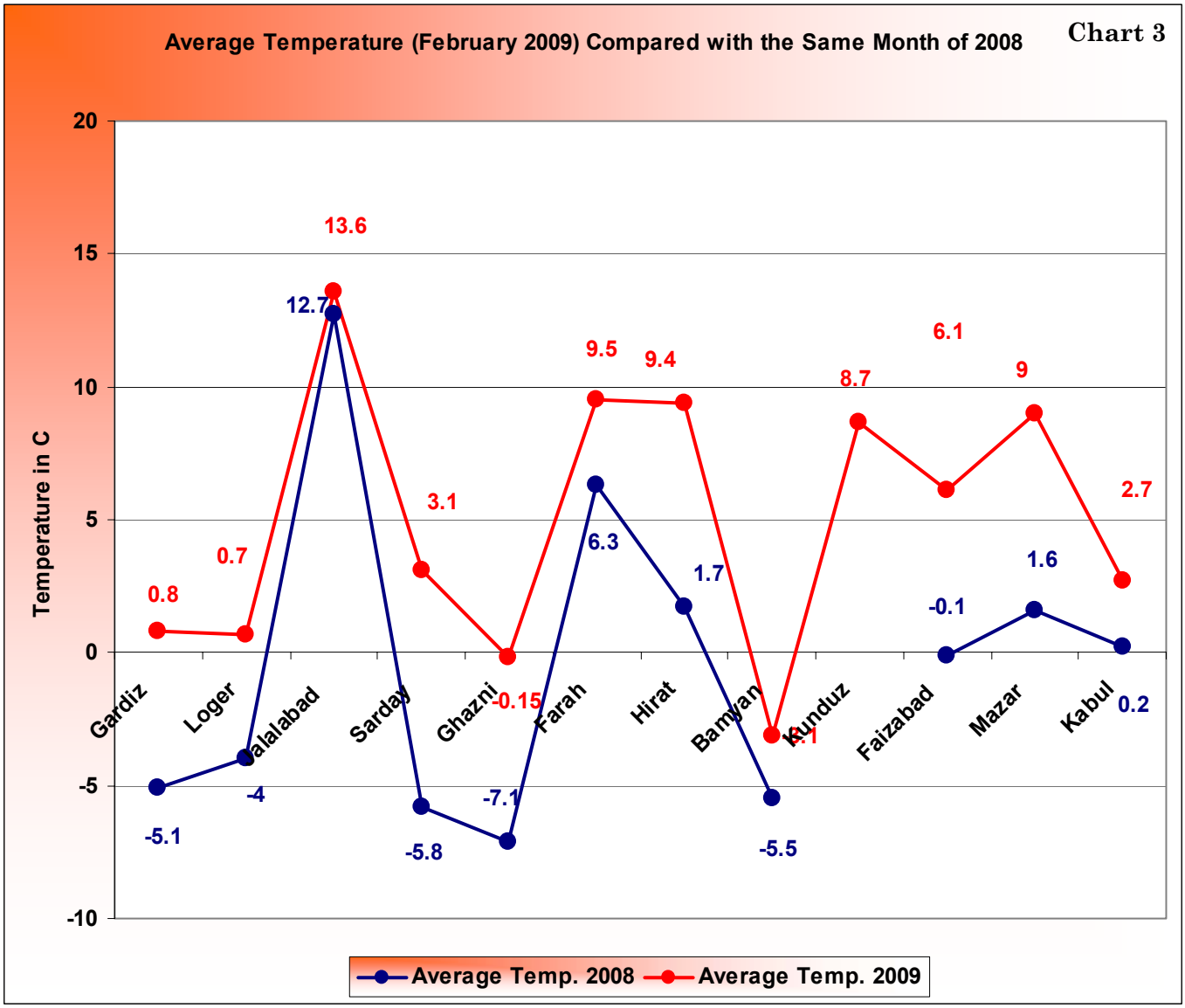
Table 2

Station	Actual Rainfall February 2009	Last year Rainfall February 2008	Long Term Average
Aibak	54	3	26.2
Asmar	128	22	56
Baghlan	57	19.6	41.8
Bamian	28.5	2	16.7
Chardara	83	8.8	56.9
Cheghchran	25.7	21	29.4
Dara e soof	85.7	10	32.6
Darulaman	55.9	27.2	71.5
Faizabad	87.5	15	63
Farah	0	19	24.8
Gardiz	62	9.6	70.8
Ghazi Abad	39	12	25.1
Ghazni	39.1	1.7	56
Hirat	42	10	39.9
Imam Sahib	47.5	72	64.1
Jalalabad	27	33.5	24.8
Kabul	57	21	58.6
Kandahar	3	5	35.1
Kariz mir	105	25	68.8
Khust	52	20	47.5
Kunduz	61.5	47	51.5
Laghman	71	41.1	35.5
Lashkargah	0	46	20.2
Lugar	72.7	5.9	34.9
Mazar	62.5	35	37.9
Mukur	17	0	56.7
Paghman	99	39	68.5
Qalal e naw	63	23	58.7
Sarday	19	10	52.9
Sari pul	57.5	41.5	18.3
Sarobi	64	30	54.9
Sheberghan	55	49.9	43.7
Shindand	36	12	35.9
Taluqan	67	11.5	78.1
Urgon	30.5	15	53.3
Uruzgan	8	7.4	48.8
Zaranj	0	0	12.7

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Average Temperature for the Month of February 2009

Chart 3

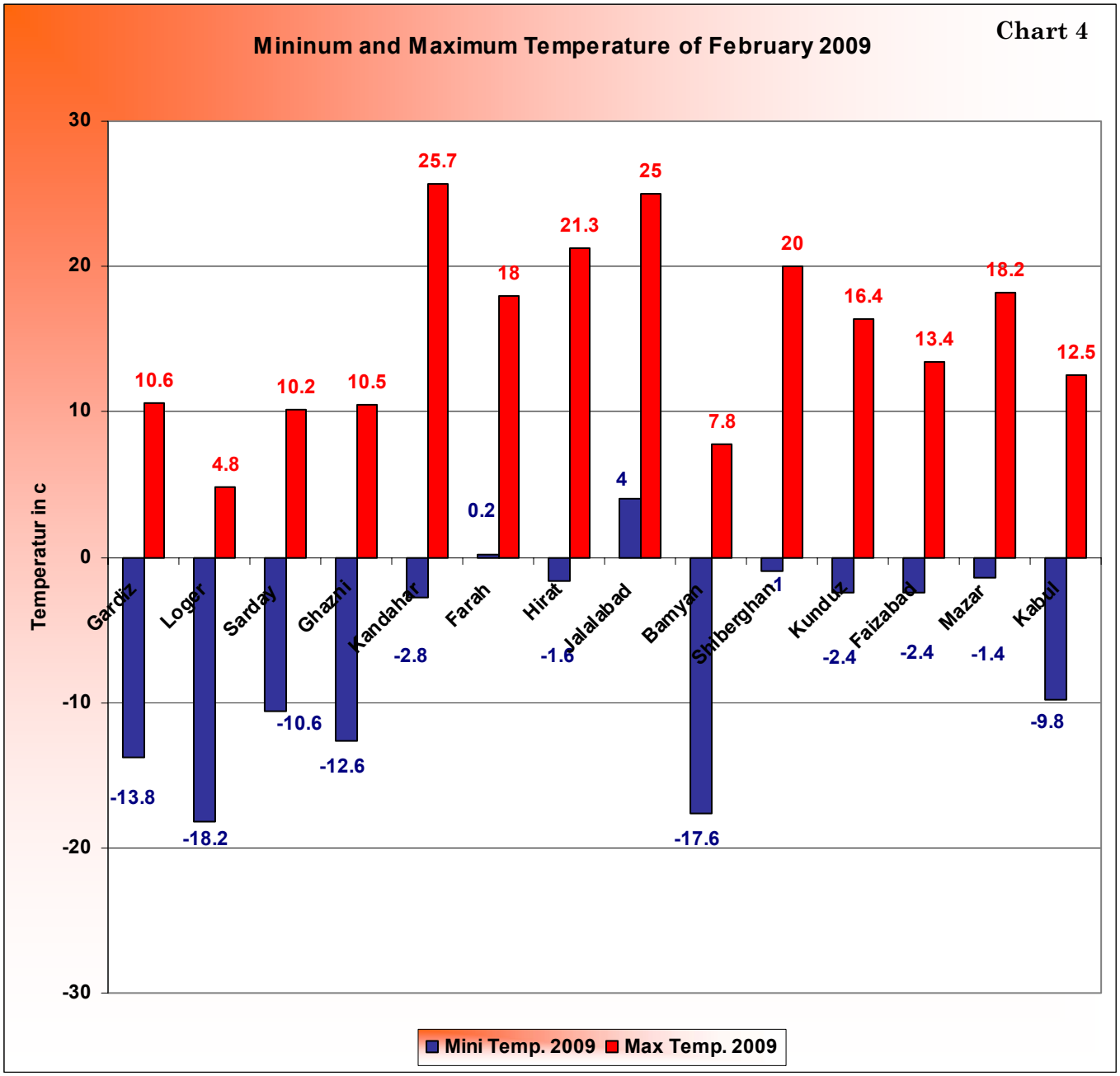


Temperature for the month of February 2009
Was 1-5C° higher than the same month of last year

Monthly average temperature for the month of February 2009 had significant increase compared to the same month in 2008 across the country. Starting in late November 2008 and during early February 2009 monthly average temperature was above average. Comparison of monthly average temperature for the month of February 2009 with the same month of last year shows that February 2009 experienced higher temperature. The warming departure of temperature during this month contributed to some early snow melting, reducing snow coverage and depth, primarily in the Northern and Northwestern regions, and temperature for the month of February current year 1 – 5 C⁰ was higher than the same month of last year.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

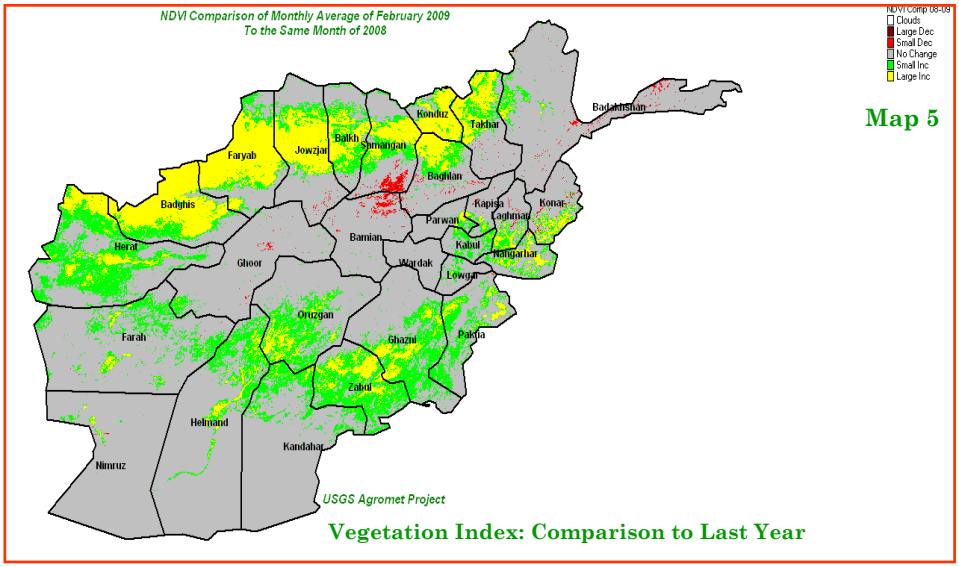
Chart 4



Loger with - 18.2 C ° experienced extreme cold in the month of February 2009 while Kandahar with 25 C° was the warmest Spot in the country.

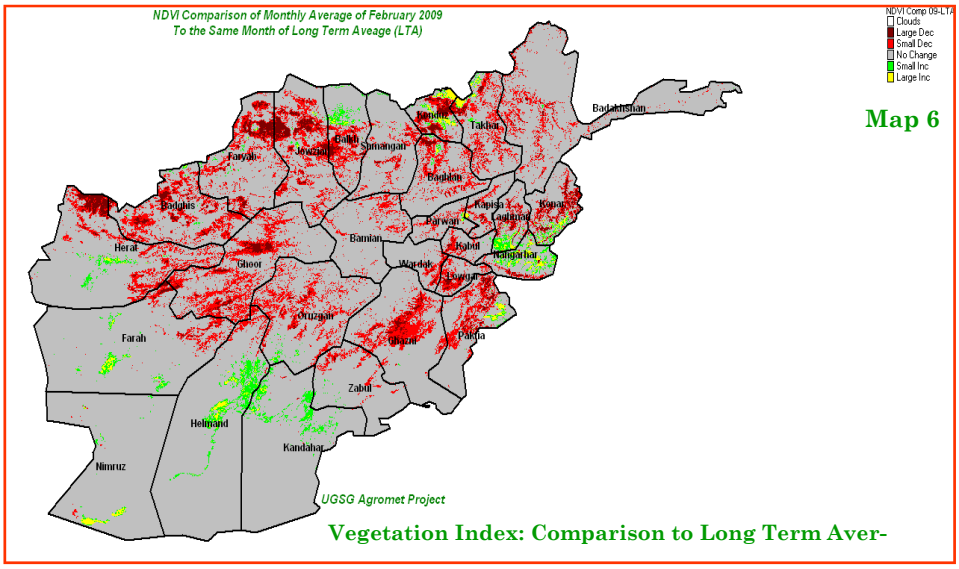
Chart (4) shows maximum and minimum temperatures for the month of February 2009 around the country. Kandahar with 25.7 ° C was the warmest spot during the month of February 2009 while Logar with – 18.2 C experienced extreme cold in this month.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO



Map 5

Vegetation Index: Comparison to Last Year



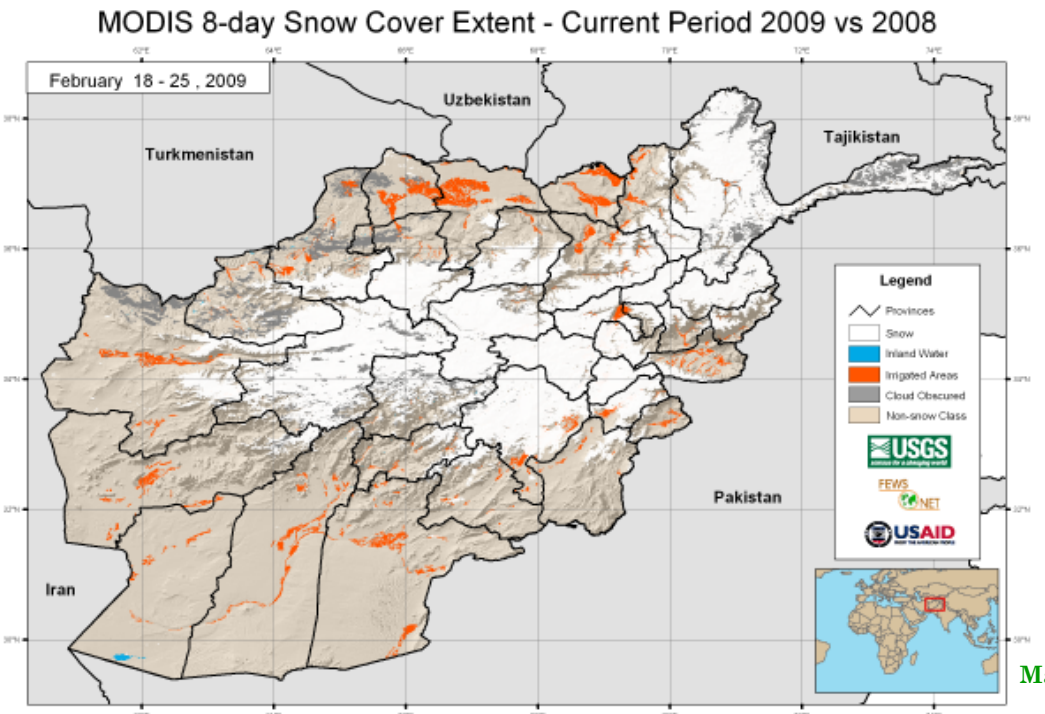
Map 6

Vegetation Index: Comparison to Long Term Aver-

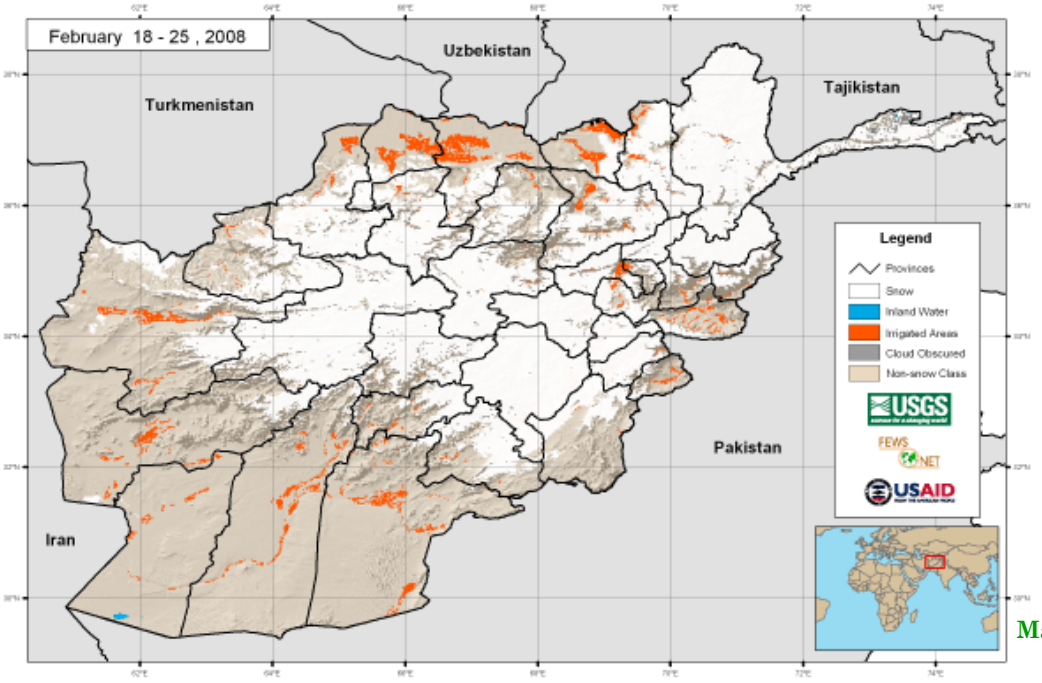
NDVI: February 2009

Comparison of monthly average of NDVI for the month of February 2009 with the same month in 2008 (map 5) shows large increase in NDVI value in the Northern, North Western and, some parts of the Northeastern regions during the month of February 2009 compared to the same month of last year, while NDVI had small increase in the in some parts in the Eastern, some parts of the Southeastern and some parts in the Western regions during this month over the same month in 2008. There is no change in NDVI value in the remaining regions of the country during the month of February 2009 compared to the same month of last year.

Comparison of monthly average of NDVI for the month of February 2009 with the same month of long term average (map 6) shows large decrease of NDVI in most parts of the country including Northern, Northwestern, Western mountainous areas, Northeastern, Eastern and most parts in the Southeastern regions during the month of February 2009 compared to the same month of long term average. There is no change in NDVI value in the Southern, Southwestern and Western flat areas during this month of current year over the same month of long term average.



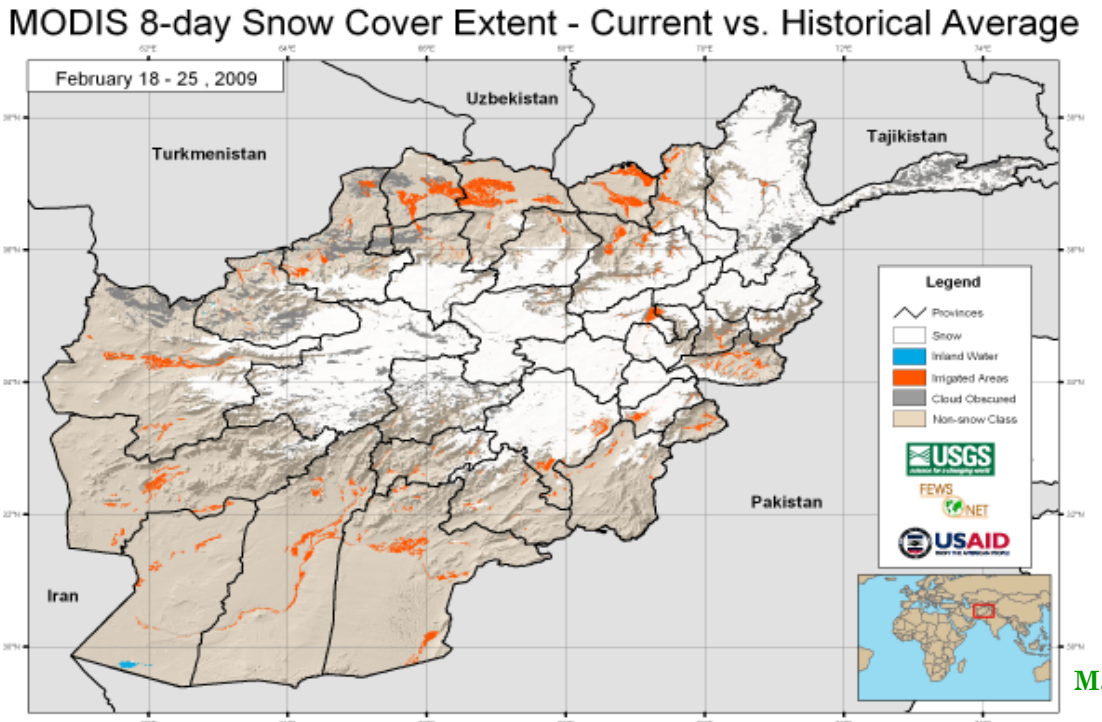
Map 7



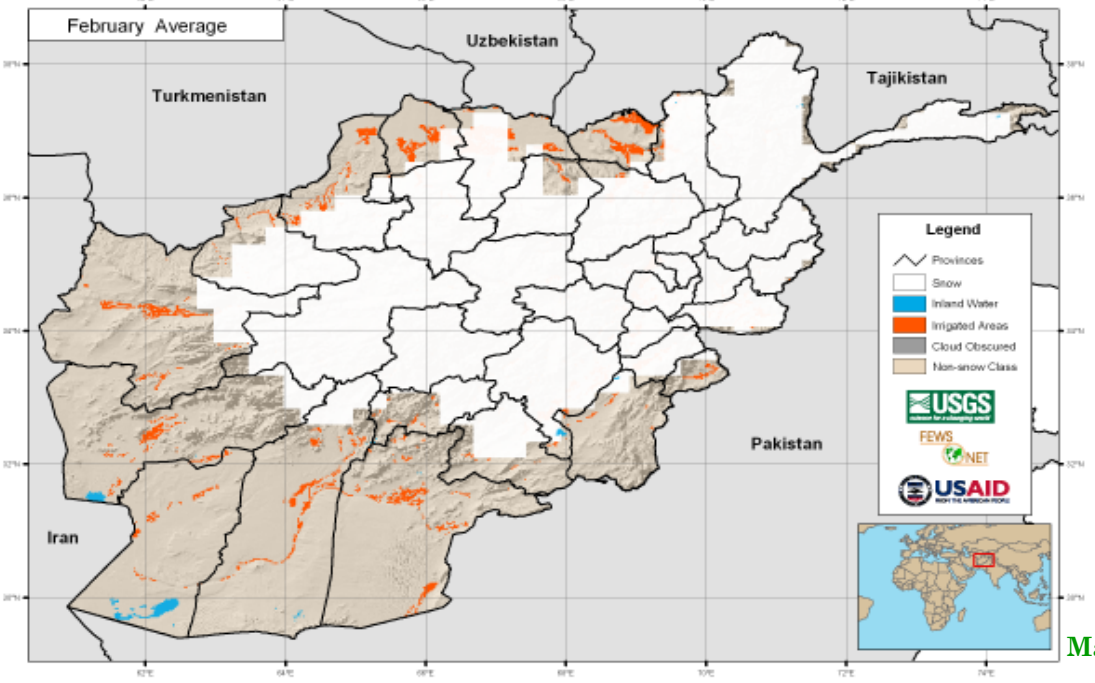
Map 8

During the month of February a series of low – pressure system tracked toward the country and brought heavy snow to the Northeastern, Hindokush area and Central Highlands which cut to mountainous passes and has made travel difficult in this region. Warm temperatures causing early snow melting, reducing snow coverage and depth particularly in the Northern and Northwestern regions, while the snow coverage remained near normal in the Northeastern, Hindokush area and Central Highlands during the month of February 2009. Comparison of snow extent for the period (February 18 – 25) 2009 with the same period in 2008 (map7) shows a decrease of snow extent in the Northern region.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO



Map 9

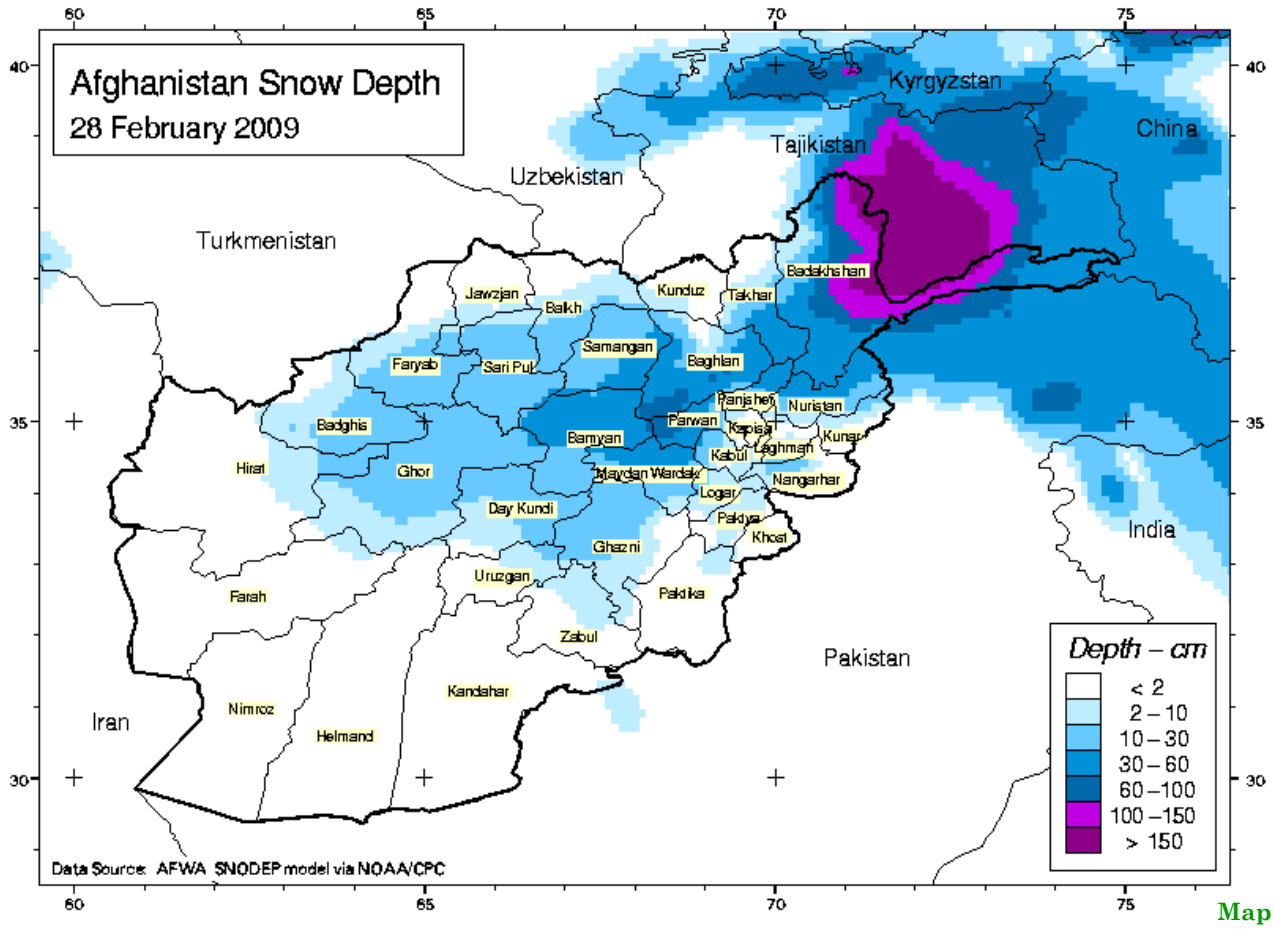


Map 10

Northwestern and limited area in the North-eastern regions. Comparison of snow extent for the month of February 2009 with the same month of long term average (map9) shows a decrease of snow extent during the month of February 2009 over the same month of long term average. Above normal temperature recorded for the month of February gradually melted snow and reduced snow extent particularly in the Northern region, Northwestern, Capital and the Western and Southern parts of Central Highlands.

Data Source: MAIL,Agromet Network, AMA, USGS,FAO

Afghanistan Snow Depth for the of February 2009



Map 11

Map (11) shows snow depth for the end of February 2009 in snow coverage areas. Snow depth more than 150 cm recorded for the Northeastern borders, 60 – 100 cm for Capital regions and 30 – 60 cm for Central Highlands.

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You can download the Afghanistan's Agromet Bulletins from these sites:

http://www.agriculture.gov.af/farsi/weather.htm

http://afghanistan.cr.usgs.gov/agro.asp

Data Source: MAIL,Agromet Network, AMA, USGS,FAO